We claim:

1   1.   A transmission electron microscope comprising:

2   a housing;

3   an electron beam generator on said housing directing an

4   electron beam along a transmission electron microscopy path

5   within said housing;

6   a luminescent screen in said housing transverse to said

7   path and insertable in said path for transforming an electron

8   image into a photon image;

9   an optical element juxtaposed with said luminescent

10   screen for rerouting said photon image through a right angle;

11   a camera outside said housing in optical alignment with

12   said optical element for registering said photon image;

13   a focussing lens optics spaced from said optical

14   element and said camera and in optical alignment with said

15   optical element and said camera; and

16   a structure fixing said luminescent screen, said

17   optical element, said camera and said focussing lens optics

18   together for joint movement relative to said path.

1   2.   The transmission electron microscope defined in

2   claim 1 wherein said optical element is a prism.

1   3.   The transmission electron microscope defined in

2   claim 2 wherein said camera is a high resolution CCD camera.

1   4. The transmission electron microscope defined in

2 claim 3 wherein said structure forms a pneumatically actuated

3 slide.

1   5. The transmission electron microscope defined in

2 claim 4 wherein said structure comprises at least two rods

3 extending through a wall of said housing, said wall being formed

4 with a vacuum window, said focusing lens optics including lenses

5 on opposite sides of said window.

1   6. The transmission electron microscope defined in

2 claim 1 wherein said camera is a high resolution CCD camera.

1   7. The transmission electron microscope defined in

2 claim 1 wherein said structure forms a pneumatically actuated

3 slide.

1   8. The transmission electron microscope defined in

2 claim 1 wherein said structure comprises at least two rods

3 extending through a wall of said housing, said wall being formed

4 with a vacuum window, said focusing lens optics including lenses

5 on opposite sides of said window.

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